

REMARKS

The Office Action of March 18, 2003, has been carefully considered.

It is noted that claims 9 and 10 are rejected under 35 USC 112, second paragraph.

Claim 8 is rejected under 35 USC 103(a) over the patent to Boozenny, et al. in view of the patent to Bentz, et al.

Claims 9 and 10 are rejected under 35 USC 103(a) over Boozenny, et al. in view of Bentz, et al., and further in view of the patent to Hartig, et al.

In view of the Examiner's rejections of the claims applicants have amended claims 8 and 9 and amended new dependent claim 13.

It is respectfully submitted that the claims now on file particularly point out and distinctly claim the subject matter which applicants regard as the invention. Applicants have amended claim 9 and added new dependent claim 13 to address the points raised by the Examiner.

In view of these considerations it is respectfully submitted that the rejection of claims 9 and 10 under 35 USC 112, second paragraph, is overcome and should be withdrawn.

It is respectfully submitted that the claims now on file differ essentially and in an unobvious, highly advantageous manner from the constructions disclosed in the references.

Turning now to the references, and particularly to the patent to Boozenny, et al., it can be seen that this patent discloses a rotating cylinder magnetron structure for a large area coating. Boozenny, et al. do not disclose or teach a centrifrically cast hollow body of sputtering material, nor do they teach or suggest a hollow body having a grain structure with columnar crystallites arranged substantially perpendicular to a circumference of the hollow body, as in the presently claimed invention. There is absolutely no hint given by Boozenny, et al. that a centrifugally cast sputtering material with such a grain structure would have any advantages over sputtering materials manufactured by a different casting practice. Since the use of centrifugal casting also makes it possible to realize grain structure in the hollow body with polymer crystallites which are arranged angular to the circumference of the hollow body, applicants respectfully submit that it would not be obvious to have a grain structure according to presently amended claim 8.

The patent to Bentz, et al. discloses a method of centrifugally casting metal under an inert atmosphere. Bentz, et al. do not teach centrifugally casting a sputtering material for a tube target with a grain structure as recited in amended claim 8 presently on file.

The Examiner combined these references in determining that claim 8 would be unpatentable over such a combination. Applicants respectfully submit that there is nothing in the teachings of either of these references taken either alone or in combination which suggests a tube target comprised of a centrifugally cast cylindrical hollow body of sputtering material wherein the hollow body has a grain structure with columnar crystallites arranged substantially perpendicular to a circumference of the hollow body, as in the presently claimed invention.

In view of these considerations it is respectfully submitted that the rejection of claim 8 under 35 USC 103(a) over a combination of the above-discussed reference is overcome and should be withdrawn.

The patent to Hartig, et al. discloses a sputter-coating target and a method of use. The Examiner combined the teachings of this reference with Bentz, et al. and Boozenny, et al. in determining that claims 9 and 10 would be unpatentable over such a combination. It is respectfully submitted that Hartig, et al. adds nothing to the teachings of Bentz, et al. and Boozenny, et al. which would result in the invention discussed above in connection with claim 8. Thus, it is respectfully submitted that the rejection of claims 9 and 10 under 35 USC 103(a) over a combination of the above-discussed references is overcome and should be withdrawn.

Support for the changes to claim 8 can be found on page 4, lines 12-18 of the specification of the present application.

Reconsideration and allowance of the present application are respectfully requested.

In the event the actual fee is greater than the payment submitted or is inadvertently not enclosed or if any additional fee during the prosecution of this application is not paid, the Patent Office is authorized to charge the underpayment to Deposit Account No. 15-0700.

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on June 9, 2003:

Klaus P. Stoffel

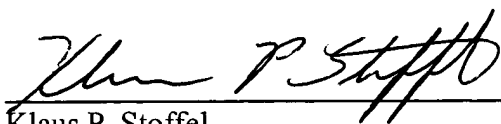
Name of applicant, assignee or
Registered Representative


Signature

June 9, 2003

Date of Signature

Respectfully submitted,



Klaus P. Stoffel

Registration No.: 31,668

OSTROLENK, FABER, GERB & SOFFEN, LLP

1180 Avenue of the Americas

New York, New York 10036-8403

Telephone: (212) 382-0700

KPS/cc